



forestry, fisheries & the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA ·0001· Environment House ·473 Steve Biko Road, Arcadia· PRETORIA

DFFE Reference: 14/12/16/3/3/1/2278

Enquiries: Ms Mathodi Mogorosi

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Mr Claude Bosman
Hoek Doornen PV 1 (Pty) Ltd
PO Box 3253
PINEGOWRIE
2123

Telephone Number: (082) 331 4098
Email Address: claude@veroniva.co.za

PER MAIL / EMAIL

Dear Mr Bosman

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT NO. 107 OF 1998, AS AMENDED: THE DEVELOPMENT OF THE 175MW HOEK DOORNEN PV 1 SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE NEAR TOUWS RIVER, WITZENBERG LOCAL MUNICIPALITY, WESTERN CAPE PROVINCE

With reference to the above application, please be advised that the Department has decided to grant authorisation. The Environmental Authorisation (EA) and reasons for the decision are attached herewith.

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014, as amended (the EIA Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 14 (fourteen) days of the date of the decision, of the decision, as well as the provisions regarding the submission of appeals that are contained in the Regulations.

In terms of the Promotion of Administrative Justice Act, Act No. 3 of 2000, you are entitled to the right to fair, lawful and reasonable administrative action; and to written reasons for administrative action that affects you negatively. Further your attention is drawn to the provisions of the Protection of Personal Information Act, Act No. 4 of 2013 which stipulates that the Department should conduct itself in a responsible manner when collecting, processing, storing and sharing an individual or another entity's personal information by holding the Department accountable should the Department abuse or compromise your personal information in any way.

Your attention is drawn to Chapter 2 of National Environmental Management Act, Act No. 107 of 1998 National Appeal Regulations published under Government Notice R993 in Government Gazette No. 38303 dated 08 December 2014 (National Appeal Regulations, 2014), which prescribe the appeal procedure to be followed. Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any

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organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

The Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: appeals@environment.gov.za;

By hand: Environment House
473 Steve Biko
Arcadia
Pretoria
0083; or

By post: Private Bag X447
Pretoria
0001

Please note that in terms of Section 43(7) of the National Environmental Management Act, Act No. 107 of 1998, as amended, the lodging of an appeal will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with the activity until such time that the appeal is finalised.

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at https://www.environment.gov.za/documents/forms#legal_authorisations or request a copy of the documents at appeals@environment.gov.za.

Yours faithfully



Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Forestry, Fisheries and the Environment

Date: 26/04/2021

cc: P Lochner	CSIR	Email: PLochner@csir.co.za / RAbed@csir.co.za
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forestry, fisheries & the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of Regulation 25 of the Environmental Impact Assessment Regulations, 2014, as amended

The development of the 175MW Hoek Doornen PV 1 Solar Photovoltaic Facility and associated infrastructure near Touws River, Witzenberg Local Municipality, Western Cape Province

Cape Winelands District Municipality

Authorisation register number:	14/12/16/3/3/1/2278
Last amended:	First issue
Holder of authorisation:	Hoek Doornen PV 1 (Pty) Ltd
Location of activity:	<u>PV Facility:</u> Hoek Doornen Farm Number 172 (Portion 1); <u>Access Road:</u> Hoek Doornen Farm Number 172 (Portion 1); Karree Kolk Farm Number 174 (Portion 1); Witzenberg Local Municipality; WESTERN CAPE PROVINCE

This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this Environmental Authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this Environmental Authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, Act No. 107 of 1998, as amended and the EIA Regulations, 2014, as amended.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment Regulations, 2014, as amended, the Department hereby authorises –

HOEK DOORNEN PV 1 (PTY) LTD

(hereafter referred to as the **holder of the authorisation**)

with the following contact details –

Mr Claude Bosman
Hoek Doornen PV 1 (Pty) Ltd
PO Box 3253
PINEGOWRIE
2123

Cell: (082) 331 4098
E-mail: claudio@veroniva.co.za

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1, Listing Notice 2 and Listing Notice 3 of the EIA Regulations, 2014 as amended:

Activity number	Activity description
<p><u>Listing Notice 1, Item 11 (i):</u></p> <p><i>"The development of facilities or infrastructure for the transmission and distribution of electricity-</i></p> <p><i>(i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts."</i></p>	<p>The Hoek Doornen PV 1 project will entail the construction and installation of underground cables or above ground power lines within the PV facility. The capacity of these cables or power lines will exceed 33kV.</p> <p>The Hoek Doornen PV 1 project will entail the construction and installation of one on-site and/or switching substation at the PV facility. The on-site substation referred to here is specifically for the section that will be managed by the Independent Power Producer <i>i.e.</i>, this includes the high voltage infrastructure leading up to the Point of Connection (<i>i.e.</i>, the Project Applicant's section of the on-site substation).</p> <p>This constitutes facilities for the distribution and transmission of electricity.</p> <p>The Hoek Doornen PV 1 project will take place outside of an urban area, on Portion 1 of Hoek Doornen Farm 172, approximately 90km from Ceres and 70km from Touws River, within the Witzenberg Local Municipality, Cape Winelands District Municipality, Western Cape Province.</p>
<p><u>Listing Notice 1, Item 12 (ii):</u></p> <p><i>"The development of—</i></p> <p><i>(ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs—</i></p> <p><i>a) within a watercourse;</i></p> <p><i>b) in front of a development setback; or</i></p> <p><i>c) if no development setback exists, within 32 metres of a watercourse, measured from the</i></p>	<p>The Hoek Doornen PV 1 project will take place outside of an urban area, on Portion 1 of Hoek Doornen Farm 172, approximately 90km from Ceres and 70km from Touws River, within the Witzenberg Local Municipality, Cape Winelands District Municipality, Western Cape Province.</p> <p>The 175MW (maximum installed) Solar PV facility will entail the construction of building infrastructure and structures (such as the solar field, offices, workshops,</p>

<p><i>edge of a watercourse."</i></p>	<p>ablution facilities, on-site substation (leading up to the point of connection), laydown area and security enclosures etc.). The infrastructure and structures are expected to exceed a footprint of 100m², and some may occur within small drainage features and 32m of the watercourses.</p> <p>The Farm Hoek Doornen incorporates portions of two river systems, namely the Klein Droëlaagte, in the north and the Groot River in the south.</p> <p>The Hoek Doornen PV 1 facility is considered to be suitably set back from the riparian environments associated with both the Groot and the Klein Droëlaagte Rivers.</p> <p>The project site can be accessed via the R356 and existing, private gravel roads (unnamed farm roads). Access to the Hoek Doornen PV 1 facility will be from an existing access road at KM point 78.00 on the R356. The existing gravel roads run on Portion 1 of Karree Kolk Farm 174 and Portion 1 of Hoek Doornen Farm 172. The existing gravel roads will be widened and upgraded for the project, with a width ranging between 4 – 8m. The total length of the access road to the site is approximately 4km (portions of which are considered new road, with a width not exceeding 8m). The road widening and upgrading will exceed a footprint of 100m² and will occur within 32m of the Groot River.</p>
<p><u>Listing Notice 1, Item 19:</u></p> <p><i>"The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse"</i></p>	<p>The project may entail the excavation, removal and moving of more than 10m³ of soil, sand, pebbles or rock from nearby watercourses on site. The project may also entail the infilling of more than 10m³ of material into the nearby watercourses. The Groot River runs through the site, as well as associated tributaries and minor drainage lines. Upgrading and widening of the access road leading</p>

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	<p>to the site may require the removal of material.</p> <p>The existing gravel road will be widened and upgraded for the project, with a width ranging between 4 – 8m. The total length of the access road to the site is approximately 4km (portions of which are considered new road, with a width not exceeding 8m).</p>
<p><u>Listing Notice 1, Item 28 (ii):</u></p> <p><i>“Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:</i></p> <p><i>(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare”</i></p>	<p>The Hoek Doornen PV 1 project will take place outside of an urban area, on Portion 1 of Hoek Doornen Farm 172, approximately 90km from Ceres and 70km from Touws River, within the Witzenberg Local Municipality, Cape Winelands District Municipality, Western Cape Province.</p> <p>In addition, the Hoek Doornen Farm was historically used for sheep farming.</p> <p>The 175MW (maximum installed) Hoek Doornen PV 1 solar facility, which is considered as commercial/ industrial development, will have an estimated footprint of approximately 250ha (excluding access roads). With access roads, the total estimated footprint will extend 260ha. The project will also entail the construction of one on-site substation (with an estimated footprint of 2ha), a Lithium-Ion Battery Energy Storage System (BESS) (which will cover an area of up to 8ha within the laydown area), as well as various infrastructure. This will constitute infrastructure with a physical footprint of more than 1 ha.</p> <p>The on-site substation referred to here is specifically for the section that will be managed by the Independent Power Producer <i>i.e.</i>, this includes the high voltage infrastructure leading up to the Point of Connection (<i>i.e.</i>, the Project Applicant’s section of the on-site substation).</p>
<p><u>Listing Notice 2, Item 1:</u></p> <p><i>“The development of facilities or infrastructure for the generation of electricity from a</i></p>	<p>The Hoek Doornen PV 1 project will take place outside of an urban area, on Portion 1 of Hoek Doornen Farm 172,</p>

<p><i>renewable resource where the electricity output is 20 megawatts or more."</i></p>	<p>approximately 90km from Ceres and 70km from Touws River, within the Witzenberg Local Municipality, Cape Winelands District Municipality, Western Cape Province.</p> <p>The project will entail the construction of a Solar PV facility, with a maximum installed capacity of 175MW (i.e., facility for the generation of electricity from a renewable resource).</p>
<p><u>Listing Notice 2, Item 15:</u> <i>"The clearance of an area of 20 hectares or more of indigenous vegetation"</i></p>	<p>The 175MW (maximum installed) Hoek Doornen PV 1 facility will have an estimated footprint of approximately 250ha (excluding access roads). With access roads, the total estimated footprint will extend 260ha. As a result, more than 20ha of indigenous vegetation would be removed for the construction of the Solar PV facility.</p>
<p><u>Listing Notice 3, Item 4 (i) (ii) (aa):</u> <i>"The development of a road wider than 4m with a reserve less than 13,5m</i> <i>i. Western Cape:</i> <i>ii. Areas outside urban areas:</i> <i>(aa) areas containing indigenous vegetation."</i></p>	<p>The Hoek Doornen PV 1 project will take place outside of an urban area, on Portion 1 of Hoek Doornen Farm 172, approximately 90km from Ceres and 70km from Touws River, within the Witzenberg Local Municipality, Cape Winelands District Municipality, Western Cape Province.</p> <p>The project will take place on land containing indigenous vegetation.</p> <p>The project site can be accessed via the R356 and existing, private gravel roads (unnamed farm roads). Access to the Hoek Doornen PV 1 facility will be from an existing access road at KM point 78.00 on the R356. The existing gravel roads run on Portion 1 of Karree Kolk Farm 174 and Portion 1 of Hoek Doornen Farm 172. The existing gravel roads will be widened and upgraded for the project, with a width ranging between 4 – 8m. The total length of the access road to the site is approximately 4 km (portions of which are considered new road with a width not exceeding 8m).</p>

<p><u>Listing Notice 3, Item 18 (i) (ii) (aa):</u> <i>"The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</i> <i>i. Western Cape:</i> <i>ii. All areas outside urban areas:</i> <i>(aa) areas containing indigenous vegetation."</i></p>	<p>The Hoek Doornen PV 1 project will take place outside of an urban area, on Portion 1 of Hoek Doornen Farm 172, approximately 90km from Ceres and 70km from Touws River, within the Witzenberg Local Municipality, Cape Winelands District Municipality, Western Cape Province.</p> <p>The project will take place on land containing indigenous vegetation.</p> <p>The project site can be accessed via the R356 and existing, private gravel roads (unnamed farm roads). Access to the Hoek Doornen PV 1 facility will be from an existing access road at KM point 78.00 on the R356. The existing gravel roads run on Portion 1 of Karree Kolk Farm 174 and Portion 1 of Hoek Doornen Farm 172. The existing gravel roads will be widened and upgraded for the project, with a width ranging between 4 – 8m. The total length of the access road to the site is approximately 4km (portions of which are considered new road with a width not exceeding 8m).</p>
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as described in the Basic Assessment Report (BAR) dated February 2021 at:

Farm Name, Portions and 21 Digit SG Code:

Farm name/s, Portions, and number/s	SG 21 Code
<p><u>PV Facility:</u> Hoek Doornen Farm Number 172 (Portion 1)</p> <p><u>Access Road:</u> Hoek Doornen Farm Number 172 (Portion 1) Karree Kolk Farm Number 174 (Portion 1)</p>	<p>C0190000000017200001 C0190000000017200001 C0190000000017400001</p>

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Coordinates

Hoek Doornen PV 1 (PV preferred site) (boundary points)	Latitude	Longitude
HK1-1	32° 59' 37.951" S	19° 55' 30.072" E
HK1-2	33° 0' 53.031" S	19° 55' 30.910" E
HK1-3	33° 0' 47.946" S	19° 56' 7.959" E
HK1-4	33° 0' 41.151" S	19° 56' 21.304" E
HK1-5	32° 59' 58.882" S	19° 56' 26.767" E
HK1-6	32° 59' 46.591" S	19° 55' 42.532" E

Hoek Doornen PV 1 - Access Road (bend points)	Latitude	Longitude
HD-R-6	32° 59' 55.911" S	19° 53' 30.706" E
HD-R-7	32° 59' 57.769" S	19° 53' 36.941" E
HD-R-8	32° 59' 51.436" S	19° 53' 57.444" E
HD-R-9	32° 59' 28.387" S	19° 55' 8.378" E
HD-R-10	32° 59' 50.312" S	19° 55' 54.039" E

On-site Substation	Latitude	Longitude
Mid-points	33° 0' 1.166" S	19° 56' 23.566" E

- for the development of the 175MW Hoek Doornen PV 1 Solar Photovoltaic Facility and associated infrastructure near Touws River within the Witzenberg Local Municipality in the Western Cape Province, hereafter referred to as "the property".

The facility will comprise the following:

- Solar Field, comprising Solar Arrays with a maximum height of 10m and maximum footprint of 250 hectares. With all associated infrastructure, including main access roads, the total surface area to be covered for the PV Facility is estimated at approximately 260ha. The solar field will include the following:
 - PV Modules;
 - Single Axis Tracking structures, Fixed Axis Tracking, Dual Axis Tracking, Fixed Tilt Mounting Structure or Bifacial Solar Modules;
 - Solar module mounting structures comprised of galvanised steel and aluminium; and
 - Foundations which will likely be drilled and concreted into the ground.
- Building infrastructure:

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- Offices (maximum height 7m and footprint of 1000 m²);
- Operational and maintenance control centre (maximum height 7m and footprint 500m²);
- Warehouse/workshop (maximum height 7m and footprint 500m²);
- Ablution facilities (maximum height 7m and footprint 50m²);
- Converter/inverter stations (height from 2.5m to 7m (maximum) and footprint 2500m²);
- On-site substation and/or a switching substation (footprint 20 000m²); and
- Guard Houses (height 3m, footprint 40m²).
- Associated infrastructure:
 - On-site substation and/or a switching substation (the relevant section that will be maintained by the Independent Power Producer);
 - Internal 33kV power lines/underground cables (either underground to a maximum depth of 1.6m or above ground with a height of 9m);
 - Lithium-Ion BESS that will have a height of up to 5 – 10m and will cover an area of up to 8 hectares (within the laydown area of the PV Facility). A lightning mast of up to 21 m will be installed within the BESS areas and substation yard;
 - Underground low voltage cables or cable trays (underground to maximum depth of 1.4m);
 - Access road ranging between 4 - 8m wide (including upgrading and widening);
 - Internal gravel roads (width of 4 - 5m);
 - Fencing (between 2 – 3m high) around the PV Facility. A perimeter road will also be constructed along the boundary of the PV plant, which will extend approximately 2.5 m wide;
 - Game fencing around the PV Facility;
 - Panel maintenance and cleaning area;
 - Storm water channels;
 - Water will either be sourced from the Witzenberg Local Municipality via trucks or from existing boreholes on site. It is anticipated that there will be 20 x 10 000 litre tanks on site to store the water during the construction and operational phases; and
 - Construction work area (i.e., laydown area of maximum 13ha).

Technical details of the Hoek Doornen PV 1 facility:

Component	Description/ Dimensions
Solar Field	
Type of technology	PV Technology
Generation Capacity (Maximum Installed)	175MW

PV Panel Structure (with following possible tracking and mounting systems): <ul style="list-style-type: none"> • Single Axis Tracking structures; • Fixed Axis Tracking; • Dual Axis Tracking; • Fixed Tilt Mounting Structure; or • Bifacial Solar Modules. 	Height: 10 m (maximum)
Area of PV Array	Footprint: Approximately 250ha
Total Surface Area to be covered (including all associated infrastructure, and main access roads to site)	Footprint: Approximately 260ha
Building Infrastructure	
Offices	Height: 7m (maximum) Footprint: 1 000m ² (maximum)
Operational and Maintenance Control Centre	Height: 7m (maximum) Footprint: 500m ²
Warehouse/Workshop	Height: 7m (maximum) Footprint: 500m ²
Ablution Facilities	Height: 7m (maximum) Footprint: 50m ²
Inverter/Converter Stations	Height: 2.5m to 7m (maximum) Footprint: 2 500m ²
On-site Substation/Switching Station and Building (i.e. the relevant section that will be maintained by the Independent Power Producer)	Height: 7 – 10m Footprint: 20 000m ² (maximum)
Guard Houses	Height: 3m Footprint: 40m ²
Associated Infrastructure	
33kV internal power lines/underground cables	Height: 9m if aboveground Depth: Maximum depth of 1.6m if underground
Battery Energy Storage System	Technology: Lithium-Ion Battery Area: Up to 8 hectares within the laydown area Height: Up to 5 – 10m

Underground low voltage cables or cable trays	Depth: Maximum depth of 1.4m if underground
Access roads (including upgrading and widening)	Width: Ranging between 4 – 8m The project site can be accessed via the R356 and existing, private gravel roads (unnamed farm roads). Access to the Hoek Doornen PV 1 facility will be from an existing access road at KM point 78.00 on the R356. The existing gravel roads run on Portion 1 of Karree Kolk Farm 174 and Portion 1 of Hoek Doornen Farm 172. The existing gravel roads will be widened and upgraded for the project, with a width ranging between 4 – 8m. The total length of the access road to the site is approximately 4km (portions of which are considered new road with a width not exceeding 8m).
Internal gravel roads	Width: Approximately 4 – 5m
Fencing around the PV Facility Perimeter	Type: Palisade or mesh or fully electrified Height: 2m to 3m
Game Fencing	Game fences will be constructed around the PV facility on the Farm Witte Wall
Storm water channels	Details to be confirmed once the Engineering, Procurement and Construction (EPC) contractor has been selected and the design is finalised. A detailed storm water management plan will need to be developed.
Work area during the construction phase (i.e., laydown area)	Footprint: Maximum 13ha (which will include the BESS)
Water Requirements	Water will either be sourced from the Witzenberg Local Municipality via trucks or from existing boreholes on site. It is anticipated that there will be 20 x 10 000 litre tanks on site to store the water during the construction and operational phases.

Conditions of this Environmental Authorisation

Scope of authorisation

1. The development of the 175MW Hoek Doornen PV 1 Solar Photovoltaic Facility and associated infrastructure near Touws River within Ward 12 of the Witzenberg Local Municipality in the Western Cape Province is approved as per the geographic coordinates cited in the tables above.
2. Authorisation of the activity is subject to the conditions contained in this Environmental Authorisation, which form part of the Environmental Authorisation and are binding on the holder of the authorisation.
3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this Environmental Authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant, or person rendering a service to the holder of the authorisation.
4. The activities authorised may only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this Environmental Authorisation must be approved, in writing, by the Department before such changes or deviations may be affected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further Environmental Authorisation in terms of the regulations.
6. The holder of an Environmental Authorisation must apply for an amendment of the Environmental Authorisation with the Competent Authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.
7. This activity must commence within a period of ten (10) years from the date of issue of this Environmental Authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for Environmental Authorisation must be made in order for the activity to be undertaken.
8. Construction must be completed within five (05) years of the commencement of the activity on site.

Notification of authorisation and right to appeal

9. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this Environmental Authorisation, of the decision to authorise the activity.
10. The notification referred to must –
 - 10.1. specify the date on which the authorisation was issued;
 - 10.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
 - 10.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
 - 10.4. give the reasons of the Competent Authority for the decision.

Commencement of the activity

11. The authorised activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014, and no appeal has been lodged against the decision. In terms of Section 43(7), an appeal under Section 43 of the National Environmental Management Act, Act No. 107 of 1998, as amended will suspend the Environmental Authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.

Management of the activity

12. A final site layout plan for the PV facility, as determined by the detailed engineering phase and micro-siting, and all mitigation measures as dictated by the final site layout plan, must be submitted to the Department for approval prior to construction. A copy of the final site layout map must be made available for comments to registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final development layout map must be submitted to the Department for written approval, prior to commencement of the activity. All available biodiversity information must be used in the finalisation of the layout map. Existing infrastructure must be used as far as possible e.g., roads. The layout map must indicate the following:
 - 12.1. The position of the solar PV panels;

- 12.2. All associated infrastructure;
 - 12.3. The finalised access route;
 - 12.4. The on-site and/or switching substation, indicating the Independent Power Producer's section and Eskom's section.
 - 12.5. All sensitive features; and
 - 12.6. All "no-go" and buffer areas.
13. The generic Environmental Management Programme (EMPr) for the substation (the relevant section that will be maintained by the Independent Power Producer), submitted as part of the BAR dated February 2021, is approved. The final site layout plan of the on-site and/or switching substation, depicting the Independent Power Producer's section and Eskom's section, must be appended to Part C of the generic EMPr for the substation.
 14. The Environmental Management Programme (EMPr) for the PV facility, submitted as part of the BAR is not approved and must be amended to include measures, as dictated by the final site lay-out map and micro-siting, and the provisions of this environmental authorisation. The EMPr must be made available for comments to registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final EMPr must be submitted to the Department for written approval prior to commencement of the activity.
 15. The EMPr amendment must include the following:
 - 15.1. The requirements and conditions of this environmental authorisation;
 - 15.2. All recommendations and mitigation measures recorded in the BAR and the specialist reports as included in the final BAR dated February 2021;
 - 15.3. A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility. Restoration must be undertaken as soon as possible after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats. This plan must ensure to include drainage features that will be infilled and or excavated;
 - 15.4. A storm water and wash water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off;
 - 15.5. A traffic management plan for the site access roads to ensure that no hazards would results from the increased truck traffic and that traffic flow would not be adversely impacted. This plan must
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- include measures to minimize impacts on local commuters e.g., limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time and avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations including farming operations;
- 15.6. An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion. This plan must ensure to include drainage features that will be infilled and or excavated;
- 15.7. An effective monitoring system to detect any leakage or spillage of any hazardous substances during their transportation, handling, use or storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems;
- 15.8. A fire management plan to be implemented during the construction and operation of the facility;
and
- 15.9. The final site layout map.
16. Once approved, the EMPr must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.
17. Changes to the approved EMPr must be submitted in accordance with the EIA Regulations applicable at the time.
18. The Department reserves the right to amend the approved EMPr should any impacts that were not anticipated or covered in the BAR be discovered.

Frequency and process of updating the EMPr

19. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 26 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.
20. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
21. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of the EIA Regulations, 2014 as amended. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
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22. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of the EIA Regulations, 2014 as amended. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
23. The holder of the authorisation must apply for an amendment of an EMPr, if such amendment is required before an audit is required. The amendment process is prescribed in Regulation 37 of the EIA Regulations, 2014, as amended. The holder of the authorisation must request comments on the proposed amendments to the impact management outcomes of the EMPr or amendments to the closure objectives of the closure plan from potentially interested and affected parties, including the competent authority, by using any of the methods provided for in the Act for a period of at least 30 days.

Monitoring

24. The holder of the authorisation must appoint an experienced Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.
 - 24.1. The ECO must be appointed before commencement of any authorised activities.
 - 24.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
 - 24.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
 - 24.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

Recording and reporting to the Department

25. All documentation e.g., audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department.
26. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the

environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department.

27. The frequency of auditing must be as per the frequency indicated in the EMPr. The frequency for the submission of the environmental audit reports to the Competent Authority must be quarterly, taking into account the processes for such auditing as prescribed in Regulation 34 of the EIA Regulations, 2014 as amended.
28. The holder of the authorisation must, in addition, submit environmental an audit report to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.
29. The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014 as amended and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.
30. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

Notification to authorities

31. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.

Operation of the activity

32. A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.

Site closure and decommissioning

33. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and Competent Authority at that time.

Specific conditions

34. No activities, which require a water use authorisation, must be allowed to encroach into a water resource without a water use authorisation being in place from the Department of Human Settlements, Water and Sanitation.
35. A pre-construction archaeological survey by a heritage specialist must be carried out to determine (1) whether any further sites are present and (2) the best area for sampling of background scatter artefacts. The findings must inform the finalisation of the layout plan in condition 12 above.
36. No activity must be undertaken in close proximity to the stone boundary beacon (archaeological site) at waypoint 132, to protect it from harm. Any road widening needed here must be undertaken towards the north.
37. If any further evidence of archaeological sites or remains (e.g., remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, marine shell and charcoal/ash concentrations), unmarked human burials, fossils or other categories of heritage resources are found during construction, Heritage Western Cape (HWC) must be alerted immediately, and a professional archaeologist or palaeontologist, must be contacted as soon as possible to inspect the findings.
38. Vegetation clearing must be limited to the required footprint for construction works. Mitigation measures must be implemented to reduce the risk of erosion and the invasion of alien species.
39. A permit must be obtained from the relevant Department for the removal or destruction of indigenous, protected or endangered plant or animal species (if any) and a copy of such permit/s must be submitted to the Department for record keeping.
40. No exotic plants may be used for rehabilitation purposes. Only indigenous plants of the area may be utilised.
41. Dust suppression measures must be always implemented during the construction phase to limit the impacts of dust.
42. Foundations and trenches must be backfilled with originally excavated materials as much as possible. Excess excavation materials must be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.
43. The washing of panels during maintenance must be done with biodegradable soaps to avoid soil contamination.
44. Construction must include design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.

45. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste must be disposed of at a landfill licensed in terms of Section 20 (b) of the National Environment Management Waste Act, 2008 (Act No.59 of 2008).

General

46. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-

46.1. at the site of the authorised activity;

46.2. to anyone on request; and

46.3. where the holder of the Environmental Authorisation has a website, on such publicly accessible website.

47. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of Environmental Authorisation: 26/04/2021


Mr Sabelo Malaza

Chief Director: Integrated Environmental Authorisations
Department of Forestry, Fisheries and the Environment

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The listed activities as applied for in the application form received on 03 December 2020.
- b) The information contained in the BAR dated February 2021.
- c) The comments received from the Western Cape Department of Environmental Affairs & Development Planning, Department of Water and Sanitation: Berg-Olifants Water Management Area, Department of Forestry, Fisheries and the Environment: Fisheries: Western Cape, Cape Nature, Department of Forestry, Fisheries and the Environment: Forestry: Western Cape, Department of Transport & Public Works (Western Cape), South African Civil Aviation Authority, Heritage Western Cape, Endangered Wildlife Trust, South African Radio Astronomy Observatory, Eskom, and interested and affected parties as included in the BAR dated February 2021.
- d) Mitigation measures as proposed in the BAR and the EMPr.
- e) The information contained in the specialist studies contained within the appendices of the BAR dated February 2021 and as appears below:

Title	Prepared by	Date
Terrestrial Biodiversity and Species Impact Assessment	SDP Ecological & Environmental Services	February 2021
Aquatic Biodiversity and Species Impact Assessment	SDP Ecological & Environmental Services	February 2021
Avifaunal Impact Assessment	Chris van Rooyen Consulting	February 2021
Riverine Rabbit Habitat Impact Assessment	3Foxes Biodiversity Solutions	October 2020
Agriculture Compliance Statement	Johann Lanz	February 2021
Socio-Economic Impact Assessment	Sandra Hill – independent Consultant	February 2021
Archaeological Impact Assessment	ASHA Consulting (Pty) Ltd	November 2020
Palaeontological Impact	Natura Viva cc	October 2020

Assessment		
Geohydrological Impact Assessment	GEOSS South Africa (Pty) Ltd	February 2021
Visual Impact Assessment	Quinton Lawson and Bernard Oberholzer	February 2021
Traffic Impact Assessment	Sturgeon Consulting (Pty) Ltd	February 2021

2. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

- a) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The need for the project was adequately addressed. The solar PV facility would help to address the need for increased electricity supply (on a national level), while also providing advanced skills transfer and training to the local communities and creating contractual and permanent employment, and economic spinoffs, in the area. The development of solar energy is important for South Africa to reduce its overall environmental footprint from coal power generation (including externality costs), and thereby to steer the country on a pathway towards sustainability. On a municipal planning level, the project supports the objectives of the Witzenberg Local Municipality's IDP (2017-2022) [Amended IDP (2020 – 2021)] which identifies renewable energy as a key economic sector. The Witzenberg Local Municipality IDP promotes the creation of an enabling environment to attract investment and support local economy. The Witzenberg Local Municipality's IDP and SDF (2020) states that any renewable energy developments in the municipal area should preferably be located inside of the Komsberg Renewable Energy Development Zone (REDZ 2). The project is located within the boundary of the Komsberg REDZ and is therefore in line with the IDP and SDF of the Witzenberg Local Municipality.
- c) The BAR dated February 2021 identified all legislation and guidelines that have been considered in the preparation of the BAR.
- d) The location of the proposed Solar PV facility.
- e) The methodology used in assessing the potential impacts identified in the BAR dated February 2021 and the specialist studies have been adequately indicated.
- f) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 as amended for public involvement.

3. Findings

After consideration of the information and factors listed above, the Department made the following findings -

- a) The identification and assessment of impacts are detailed in the BAR dated February 2021 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The information contained in the BAR dated February 2021 is deemed to be accurate and credible.
- d) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- e) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the BAR and will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.

Annexure 2: Locality Map and Coordinates

